

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONSTRUCTION PERMIT**

Permit No. 9973-AC017

Date: January 20, 2000

Revokes Permit No. 9873-AC033

The Department of Environmental Conservation, under the authority of AS 46.03, AS 46.14, 6 AAC 50, 18 AAC 15, and 18 AAC 50, rescinds Permit No. 9873-AC001 and issues this Air Quality Control Construction Permit to:

Owner: ARCO Alaska, Inc., and Anadarko Petroleum Corporation

Operator: ARCO Alaska, Inc.
700 G Street
P.O. Box 100360
Anchorage, AK 99510-0360

Permittee: ARCO Alaska, Inc.

Facility: Alpine Development Project, Central Processing Facility

UTM Coordinates: Northing 7805.5 km, Easting 578.0, UTM Zone 5
Township/Range: Sections 5, 6, and 32, Township 11 N, Range 5 E,
Sections 1, 2, and 4, Township 11 N, Range 4 E,
Umiat Meridian

The Permittee proposes to operate Doyon Drill Rig 19, and install three turbines, twelve heaters, five emergency standby diesel-fired generators, two waste incinerators, two flare systems, and miscellaneous construction equipment as part of the Alpine Development Project.

This permit authorizes the Permittee to install a processing facility, development drill rigs, and associated equipment in accordance with the terms and conditions of this permit, and as described in the original permit application and subsequent application supplements listed in Exhibit D. This permit also authorizes the Permittee to operate the sources referenced above as provided by AS 46.14.120.

John M. Stone, Manager
Air Permits Program

Date

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The Permittee shall comply with the following listed permit conditions.

I. Standard Permit Conditions

- A. The Permittee must comply with each permit term and condition; noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, and is grounds for:
 - 1. An enforcement action;
 - 2. Permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - 3. Denial of an operating permit application.
- B. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.
- C. Each permit term or condition is independent of the permit as a whole, and remains valid regardless of a challenge to any other part of the permit.
- D. Compliance with the permit terms and conditions is considered to be compliance with those requirements that are:
 - 1. Included and specifically identified in the permit; or
 - 2. Determined in writing in the permit to be inapplicable.
- E. The permit may be modified, reopened, revoked and reissued, or terminated for cause; a request by the Permittee for modification, revocation and reissuance, or termination of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- F. The permit does not convey any property rights of any sort, nor any exclusive privilege.
- G. The Permittee shall allow an officer or employee of the Department, or an inspector authorized by the Department, upon presentation of credentials and at reasonable times, with the consent of the owner or operator, to:
 - 1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

2. have access to and copy any records required by the permit;
 3. inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit; and
 4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.
- H. The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit, or to determine compliance with the permit; upon request, the Permittee shall furnish to the Department copies of records required to be kept; the Department, in its discretion, will require the Permittee to furnish copies of those records directly to the federal Administrator.

II. Record Keeping, Reporting, and Testing Conditions

- A. Certify all reports, compliance certifications, or other documents submitted to the Department under the permit as required by 18 AAC 50.205.
- B. Except for excess emission reports as provided for in Condition II(H) and II(I), submit test plans, reports, certifications, and notices required under this permit to the Department's Air Permits Program, Compliance Assurance Group, 610 University Avenue, Fairbanks, AK 99709; telephone (907) 451-2139, facsimile (907) 451-2187.
- C. Keep records of required monitoring data and support information for at least five years after the date of the collection; support information includes calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by this permit. Keep monitoring and compliance records as required by the Clean Air Act and applicable federal air quality regulations.
- D. Conduct source testing as requested by the Department pursuant to 18 AAC 50.220 and required by this permit. Comply with all applicable federal Air Quality requirements with respect to source testing, and:
 1. Use the applicable test methods set out in 40 CFR Part 60, Appendix A, and 40 CFR Part 61, Appendix B, effective July 1, 1997, to ascertain compliance with applicable standards and permit requirements.
 2. Conduct source tests of unit exhausts and report the results as described. The Permittee may propose alternative test methods if such methods can be shown to be of equivalent accuracy, and will ensure compliance with the applicable standards or limits. Alternative test procedures must be approved by the Department prior to the test date.

- a. Nitrogen Oxides, NO_x, expressed as NO₂ (ppm, lb/MMBtu, and lbs/hr): Reference Method 7E or Method 20 specified in 40 CFR, Part 60, Appendix A.
 - b. Oxygen, O₂ (percent): Reference Method 3 or 3A as specified in 40 CFR, Part 60, Appendix A.
 - c. Stack Velocity, Volumetric Flow Rate, and Emission Rates: Reference Methods 1-4 and 19 as specified in 40 CFR, Part 60, Appendix A.
 - d. Particulate Matter (grains/dscf, lb/MMBtu, and lb/hr): Reference Method 5 as specified in 40 CFR, Part 60, Appendix A.
 - e. Sulfur dioxide, SO₂ (ppm, lb/MMBtu, and lbs/hr): Reference Method 6 or 6C as specified in 40 CFR, Part 60, Appendix A.
 - f. Visible Emission Surveillance (Percent opacity): Reference Method 9 as specified in 40 CFR, Part 60, Appendix A.
 - g. Carbon Monoxide, CO (ppm, lb/MMBtu, and lb/hr): Reference Method 10 as specified in 40 CFR, Part 60, Appendix A.
 - h. Visible Determination of Smoke Emissions from Flares: Reference Method 22 as specified in 40 CFR, Part 60, Appendix A.
3. Submit to the Department, within 60 days after receiving a request and at least 30 days before the scheduled date of the tests, a complete plan for conducting the source tests;
 4. Give the Department written notice of the test dates 10 days before each test or series; and
 5. Within 45 days after completion of the set of tests, submit the results, to the extent practical, in the format set out in *Source Test Report Outline* in Volume III, Section IV.3, of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8).
- E. Install; calibrate; conduct applicable continuous monitoring system performance tests listed in 40 CFR 60, Appendix B effective July 1, 1997, and certify test results; operate; and maintain air contaminant emissions and process monitoring equipment on the sources as described herein and in documents provided by the Permittee, listed in Exhibit D.

Submit monitoring equipment siting, operation, and maintenance plans and procedures for approval by the Department.

For continuous emission monitoring systems, comply with each applicable monitoring system requirement, as listed in: 40 CFR 60.7 for notification and record keeping; 40 CFR 60.13 for monitoring requirements; 40 CFR 60.19 for general notification and reporting requirements; the applicable subpart of 40 CFR 60 as incorporated by

reference in Condition V of this permit; and quality assurance procedures in 40 CFR 60, Appendix F, and the *EPA Quality Assurance Handbook For Air Pollution Measurements*, EPA/600 R-94/038b, effective July 1, 1997. Attach to the Facility Operating Report required by Condition II(G), a copy of each *Quarterly Summary Report--Gaseous and Opacity Excess Emission and Monitoring System Performance* as set out in 40 CFR 60.7, and a copy of each continuous emission monitoring system *Data Assessment Report for Quality Assurance Procedures* conducted in accordance with 40 CFR 60, Appendix F.

- F. The Permittee may seek Department approval of alternate monitoring, record keeping, and reporting requirements than those listed in this permit by submitting a written request to the Department. Until such time as the Department approves an alternative monitoring, record keeping, or reporting requirement, the Permittee shall comply with the requirements listed in this permit.
- G. Submit to the Department two copies of a quarterly Facility Operating Report, as described in Exhibit B of this permit by January 30th, April 30th, July 30th, and October 30th each year for operations during the preceding calendar quarter.
- H. Excess emission reporting--Report excess emissions that present a potential threat to human health or safety as soon as possible to the Department's Division of Spill Prevention and Response (SPAR). From 8:00 AM to 4:30 PM, report the event to SPAR by telephone at (907) 451-2121, or by facsimile at (907) 451-2362. Outside of this time, report the event to SPAR by telephone at (800) 478-9300. Provide a complete description of the event and any assistance required from the Department.
- I. Excess emission reporting--In addition to reporting under Condition II(H):
 - 1. Give written notice of all excess emissions or deviations from permit requirements. Submit the notice as soon as possible and no later than two working days after the event commencement or discovery, to the Department's Air Permits Program, Attention—Excess Emission Report, 555 Cordova Street, Anchorage, AK 99501, by facsimile (907) 269-7508, or by e-mail to airreports@envircon.state.ak.us. Complete and submit the Excess Emission Report (EER) form provided in Exhibit F, or provide an alternative written notice with complete information for each element listed in the EER form. Except as provided for in Condition II.I(2), certify the submitted EER in accordance with 18 AAC 50.205.
 - 2. The Permittee may certify the EER in accordance with 18 AAC 50.205 by attaching to the periodic Facility Operating Report required by Condition II(G), the certification statement and signature of the responsible official.

- J. Operate each source in compliance with the applicable emission standards specified by 18 AAC 50.040-.070, by an applicable federal New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP), by limits established as the result of a BACT or LAER determination, or the owner-requested emission limits, standards, fuel specifications, and operating limits.

III. Notification and Operating Conditions

- A. The Permittee is authorized to install and operate the emission sources at the Alpine facility as listed in Exhibit A.
- B. Develop and implement standard operating and maintenance procedures for each source listed in Exhibit A, Sections A and B, of this permit. Permittee shall keep a copy of the procedures available at a location within the facility that is readily accessible to operators of the equipment and to authorized representatives of the Department.

Install, maintain, and operate fuel-burning equipment, process equipment, emission control devices, and testing equipment and monitoring equipment to provide an optimum control of air contaminant emissions during all operating periods.

- C. Develop and provide training at the Alpine Central Processing Facility to orient each facility operator regarding the terms, conditions, and obligations of the Construction Permit. Maintain a log of the time, place, and list of attendees for each training session and a copy of training material on file at the facility.
- D. Keep a copy of this permit, the State Air Quality Control Regulations 18 AAC 50, and Alaska Statutes 46.14, on file at the facility.
- E. Document the date construction commences, stops, and when construction is completed for the facility. If subject to the permit re-opening provisions of 18 AAC 50.320(c)(1) or (2), notify the Department and submit a new Best Available Control Technology assessment for review before commencing or continuing construction. Upon receipt of the notification and assessment, the Department will reopen the permit in accordance with 18 AAC 50.320(c).
- F. For each fuel burning equipment and incinerator source listed in Exhibit A, Sections A and B:
 - 1. Monitor and record the hours of operation;
 - 2. Provide fuel consumption records for each source listed in Section A. The fuel use may be estimated by measurement techniques and calculations approved by the Department. Liquid fuel flow meters and totalizers, if used, must be calibrated and certified to be accurate to $\pm 5\%$; and

3. For each month report the hours of operation of the sources listed in Exhibit A, Sections A and B, and fuel consumption for each source listed in Exhibit A, Section A, in the Facility Operating Report required by Condition II(G).

IV. 18 AAC 50.010 and 18 AAC 50.020: Ambient Air Quality Standards and Increments

The Permittee shall not interfere with the attainment or maintenance of the Ambient Air Quality Standards listed in 18 AAC 50.010, and shall not cause or contribute to a violation of the maximum allowable ambient concentrations (the PSD increments) listed in 18 AAC 50.020 as follows:

- A. Except as provided for in Condition IV.B, construct and operate the facility in accordance with the application and application supplements listed in Exhibit D of this permit.
- B. Notify the Department prior to making any change at the facility that deviates from the permit application and application supplements listed in Exhibit D, such as changes in equipment size, configuration, or location.
 1. For changes pursuant to 18 AAC 50.370(a), the Permittee may notify the Department pursuant to 18 AAC 50.370(b) and may implement the changes in accordance with 18 AAC 50.370(c).
 2. For other changes:
 - a. Ask the Department whether additional ambient impact assessment modeling is warranted for the proposed change.
 - b. Upon receiving written Department notice that modeling is warranted, prepare and submit to the Department an ambient impact assessment for the specified air contaminant and averaging period.
 - c. The Permittee shall not make the change until the Department concurs the change will not interfere with attainment or maintenance of ambient standards and increments.
- C. Operate, maintain, and calibrate one ambient air contaminant monitoring station to collect no less than one complete year of data. The station must be sited at Nuiqsut, and collect meteorological data, and ambient nitrogen oxides, nitrogen dioxide, sulfur dioxide, and PM-10 data. Operate, maintain, and calibrate the station as follows:
 1. Submit to the Department, for approval, an ambient monitoring plan for nitrogen oxides, nitrogen dioxide, sulfur dioxide, particulate matter, and meteorological

- monitoring. The plan will identify the monitoring site and rationale for site selection, and will be submitted not later than February 15, 1999¹.
2. Equip the station to continuously measure pollutant data.
 3. Operate the station in accordance with the procedures specified in the *Alaska Quality Assurance Manual for Ambient Air Quality Monitoring*, dated August 1996; *On-Site Meteorological Program Guidance for Regulatory Modeling Applications*, August 1995; *Quality Assurance Handbook for Air Pollution Measurement Systems, Volumes II (April 1994) and IV (March 1995)*; and as outlined in AAI's, approved Ambient Air Quality Monitoring Plan to collect no less than one year of ambient data.
 4. Operate the station to obtain a minimum of 80% data capture per calendar quarter for pollutant data measured, and 90% data capture per calendar month for meteorological data.
 5. Submit a copy of a quarterly data report within 60 days after the end of a calendar quarter. List all pollutant and meteorological data collected, system down-time, periods for which collected data do not meet the data validation requirements and periods for which the data is questionable. List equipment audit results during the quarter.
- D. Any emissions that occurred when the Alpine facility was operating under permit no. 9873-AC033 shall be counted toward any twelve-month rolling average emission calculations required by this permit.
- E. Before operation of the wire-line unit and slick-line unit, extend the diesel engine exhaust stack(s) to no less than 14 feet above ground level. Before operation of the coil tubing unit and well frac unit(s) extend the diesel engine exhaust stack(s) to no less than 12 feet above ground level. The wire-line, slick-line, coil tubing, and well frac units are well servicing equipment included as part of the construction reserve pool shown in Exhibit A, Section C. Retain records, with photographs, to document the stack configuration changes for the wire—line, slick-line, coil tubing, and well frac units used at the Alpine Development Project.
- F. Before operation of the Doyon 19 drill rig, conduct the following changes to the exhaust stacks of generators DR1 and DR3-DR6: cluster the stack outlets as set out in the application supplement dated December 16, 1998, with a minimum exhaust height of 13.3 meters above ground level. Before drilling commences, submit to the Department a notification with as-built drawings and photographs to document the stack

¹ This condition remains in place from permit no. 9873-AC033. The ambient monitoring plan has already been submitted to the Department and is under Department review.

configuration changes.²

G. The Permittee may establish a temporary exclusion zone to preclude public access within the boundaries shown in the map included in Exhibit E. To prevent public access within the exclusion zone, the Permittee shall:

1. Post the area with high contrast signs printed in English and Inupiat which indicate *No Trespassing – Restricted Entry*. Place the signs with a spacing of at least one sign per 250 meters along the temporary exclusion zone boundary. Signs are not required on the section of the boundary that cross lake L9313 when the lake is not frozen.
2. Maintain surveillance over the area according to the Department approved “Public Access Control Plan.”³ This plan may only be changed with Department concurrence.

H. The Permittee shall notify the Department within 10 days of the following events.

1. Establishment of the temporary exclusion zone.
2. Discontinuance of the temporary exclusion zone.
3. The start of “Phase III” operations⁴. The start of Phase III operations will automatically discontinue the temporary exclusion zone if it is still in effect. Phase III operations commence no later than the day after which all of the following items are completed:
 - a. Commissioning⁵ of the primary generator turbine (CF-G-70001)
 - b. Commissioning of the stand-by generator turbine (CF-G-70002), and
 - c. Startup⁶ of the production facility.

I. The Permittee may operate the sources listed in Exhibit A, Sections D and E, only during the time periods shown below, and no later than February 1, 2001. The

² This condition remains in place from permit no. 9873-AC033. The notification regarding the Doyon 19 stack changes has already been submitted to the Department.

³ The approved Public Access Control Plan was submitted to the Department on January 10, 2000.

⁴ Upon commencement of Phase III, the facility will start normal operation. Continued operation may also occur during Phase III.

⁵ Commissioning is part of the installation process and means operation for purposes of ensuring all components, including the control system, are functioning properly.

⁶ Startup means delivery of the Alpine oil to the sales line and reinjection of Alpine produced gas into the Alpine reservoir. If reinjection of produced gas or delivery of oil to the sales line has not occurred by February 1, 2001, then February 1, 2001 is considered the date of startup for the purposes of this permit.

Permittee shall limit operation of the sources listed in Exhibit A, Sections D and E to the number of hours indicated in the exhibit.

1. The Permittee may operate the sources listed in Exhibit A, Section D only until the establishment of the temporary exclusion zone (under Condition H.1), or until the start of Phase III operations (under Condition H.3), whichever event occurs first.
 2. The Permittee may operate the sources listed in Exhibit A, Section E, Column 5 only while the temporary exclusion zone described in Condition IV.G and documented in IV.H.1 and IV.H.2 is in effect. Once the temporary exclusion zone is discontinued, any remaining operation authorized under Exhibit A, Section E, Column 5 is lost. The remaining operational hours shall not be transferred to the subsequent operation allowed under Exhibit A, Section E, Column 6.
 3. The Permittee may operate the sources listed in Exhibit A, Section E, Column 6 only after the exclusion zone is discontinued (under Condition H.2), and until the start of the Phase III operations (under Condition H.3).
 4. The sources that are shown in Exhibit A, Section E, with a single block of hours of operation across both Columns 5 and 6, may only be operated upon establishment of the temporary exclusion zone (under Condition H.1) until the start of Phase III operations (under Condition H.3).
- J. By February 1, 2001, or by the start of Phase III, the sources listed in Exhibit A, Section E, must be removed, with the exception of sources UT1, UT2, TG27, H3 and H5. The Permittee may continue to operate sources UT1, UT2, TG27, H3 and H5 under the provisions provided in Exhibit A, Section A, and Condition IV.L.
- K. For the construction sources listed in Exhibit A, Sections D and E:
1. Record the daily hours of operation of on-site sources listed in Exhibit A, Section D that have operational limits and ratings greater than 300 kW. Equipment authorized for continuous operation may be excluded from this requirement.
 2. Record the daily hours of operation of the on-site sources listed in Exhibit A, Section E that have operational limits. Equipment authorized for continuous operation may be excluded from this requirement.
 3. Attach to the facility operating report required by Condition II(G) the recorded hours of operation for each of the sources subject to Condition IV.K.1 and 2 that were on-site during the reporting period. For

each unit removed from the Alpine site during the reporting period, indicate the date of removal.

- L. Upon commencement of Phase III, operate the following sources no greater than 500 hours per unit per twelve-month period on distillate liquid fuel⁷:

1. Nuovo Pignone PG5371 Turbine Unit CF-G-70001;
2. Nuovo Pignone PGT10+ Turbine Unit CF-G-70002;
3. Utility Heat Medium Heater Unit CF-H-64004;
4. Utility Heat Medium Heater Unit CF-H-64005;
5. Cummins Emergency Standby Generator Unit CF-G-70003;
6. Cummins Emergency Standby Generator Unit CF-G-70004; and
7. Cummins Emergency Standby Generator Unit TG27.

Operate the emergency standby generators units CF-G-70003 & CF-G-70004 no greater than sixteen cumulative hours in any day. Prior to Phase III, the Permittee may operate the standby generator turbine (CF-G-70002) and utility heat medium heaters (CF-G-64004 & CF-H-64005) for up to 4,380 hours each on distillate liquid fuel. Upon commencement of Phase III operation as defined in Condition IV.H.3, operate Camp Generators UT1 and UT2 no more than 200 hours per twelve-month period on distillate liquid fuel.

- M. Drill rig sources CP1 and CP2 may be initially operated continuously. Upon conversion of drill rig operations to high-line power, the Permittee may operate these sources for no greater than 500 hours per twelve-month period⁸.
- N. Drill rig sources DR11 through DR15 may initially be operated continuously. Upon conversion of drill rig operations to high-line power, the Permittee may operate these sources no greater than 8,322 hours per twelve-month period.
- O. Before conversion of drill rig operations to high-line power, bulk plant sources BP1 and BP2 may be operated according to the following restrictions:
1. Before the temporary exclusion zone is in effect, BP1 and BP2 may be operated up to 4,440 hours per twelve-month period.
 2. After the temporary exclusion zone is in effect and before conversion of the drill rig sources to high-line power, BP1 and BP2 may be operated continuously.

⁷ For Conditions IV.L, and IV.Q, the listed equipment is found in Exhibit A, Section A.

⁸ For Conditions IV.M, IV.N, IV.O, and IV.P, the listed sources are found in Exhibit A, Section B.

- P. Convert drill rig operations to high-line power within three months after commencement of Phase III operations as defined in Condition IV.H.3, and no later than February 1, 2001. Notify the Department of the date upon which drill rig high-line power conversion is completed. After drill rig conversion to high-line power:
1. Limit concurrent operation of Drill Rig Sources DR1, DR3, DR5, and DR6 to no more than one unit, except when moving the drill rig between wells. Limit concurrent operation of Drill Rig Sources DR1, DR3, DR5, and DR6 to no more than two units when moving the Drill Rig between wells;
 2. Do not operate DR2 & DR4 (Cat 399TA) during drilling operations at CD-1 or CD-2. Drill Rig Source DR2 is authorized to operate during rig movement activities;
 3. Monitor and record the hours of operation, dates of operation, and operating location (i.e., CD-1 or CD-2) for Drill Rig Sources DR1, DR3, DR5, and DR6;
 4. Notify the Department in accordance with Permit Condition II(I), if concurrent operation of any unit DR1, DR3, DR5, and DR6 occurs during drilling activities conducted under high-line power configuration;
 5. Do not operate sources BP1 and BP2; and
 6. Notify the Department of the date upon which development drilling is complete.
- Q. Operate the waste incinerators units CF-U-59001A & CF-U-59001B no greater than 7,300 hours per unit per twelve-month period.
- R. Monitor, record, and limit fuel consumption of the equipment listed in the construction reserve pool listed in Exhibit A, Section C, as follows:
1. Generic Well Servicing Equipment and the Well Frac Unit(s) for a total of no greater than 5,831 gallons per day;
 2. Generic Well Servicing Equipment to no greater than 533,033 gallons during any 12-month period;
 3. Well Frac Unit(s) for no greater than 87,445 gallons during any 12-month period. The Well Fractionation Unit is permitted to operate only during the period November 1 through May 31.

- S. Report in the Facility Operating Report the duration of produced gas flaring, estimated NO_x, CO, SO₂, and PM emissions, and report the total quantity of gas flared. Describe or document whether the flaring incident is part of the process facility commissioning activities.

V. 18 AAC 50.040: Federal Standards Adopted by Reference

Comply with the requirements of 40 CFR 60, New Source Performance Standards (NSPS), 40 CFR 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS), and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Source Categories as they apply to the equipment specified below.

Submit a copy of all NSPS and NESHAPS reporting to the U.S. EPA Region 10 and the Department, as required by the applicable Federal standards. The Permittee may attach periodic federal reporting to the Facility Operating Report required by Condition II (G).

Notify the Department of any U.S. Environmental Protection Agency (EPA) granted waivers of NSPS or NESHAP emission standards, record keeping, monitoring, performance testing, or reporting requirements within 30 days after receipt of a waiver.

If the permit terms in Condition V conflict with the Federal Standards adopted by reference, comply with the Federal Standards.

A. 40 CFR 60, Subpart A;

In accordance with 40 CFR 60, Subpart A, 40 CFR 61, Subpart A, and 18 AAC 50.040, for each construction, modification, or reconstruction of affected facilities and sources regulated under 40 CFR 60 and 61:

1. Notify the Department and EPA
 - a. No later than 30 days after construction/reconstruction commencement in accordance with 40 CFR 60.7(a)(1);
 - b. No more than 60 days prior and no less than 30 days prior to initial start-up, as defined in 40 CFR 60.2 (setting into operation of any affected facility for any purpose) in accordance with 40 CFR 60.7(a)(2);
 - c. No more than 15 days after start-up in accordance with 40 CFR 60.7(a)(3);
 - d. 60 days prior or as soon as practicable before modifying facilities that would be subject to NSPS as set out in 40 CFR 60.7(a)(4);
 - e. No less than 30 days prior to conducting a demonstration of continuous monitoring system performance as set out in 40 CFR 60.7(a)(5);
 - f. No less than 30 days prior to the anticipated date for conducting opacity observations or using a continuous opacity monitoring system required by 60.11(e)(1), as set out in 40 CFR 60.7(a)(6) and (7).

- g. No less than 60 days prior to commencement of reconstruction or replacement of a facility, as defined in 40 CFR 60, notify the Department and EPA with information as set out in 40 CFR 60.14(d).
2. For affected facilities regulated under 40 CFR 60, maintain records of occurrence and duration of start-up, shut-down or malfunction of an affected facility, control equipment or monitoring equipment as set out in 40 CFR 60.7(b). Submit continuous monitoring system performance reports as set out in 40 CFR 60.7(c) and (d). Maintain a file of measurements as set out in 40 CFR 60.7(e).
3. For affected facilities regulated under 40 CFR 60, 60 days after achieving maximum production rate, but not later than 180 days after initial startup and upon the EPA Administrator's request conduct performance tests as follows:
 - a. Notify the Department and EPA at least 30 days in advance of any performance test and opacity observation as set out in 40 CFR 60.8(d), 60.11(e)(1), and Condition II.D;
 - b. Conduct performance tests and data reduction as set out in 40 CFR 60.8(b) and (f);
 - c. Provide the Department copies of EPA administrator approvals for alternative performance testing;
 - d. Provide sampling ports and platform(s), safe access to platform(s) and utilities, and conduct testing as set out under 40 CFR 60.8(c) and (e).
 - e. Furnish the Department and EPA a copy of the performance test and opacity observations as set out in 40 CFR 60.8(a) and 60.11(e)(2)-(5).
4. At all times maintain and operate each affected facility including pollution control equipment, as set out in 40 CFR 60.11(d);
5. The Permittee is prohibited from concealing a violation of any applicable NSPS standard as set out in 40 CFR 60.12.
6. For continuous monitoring systems and devices required under NSPS:
 - a. Ensure all systems and devices are installed, calibrated, and operational as set out in 40 CFR 60.13(b), prior to conducting a performance test under 40 CFR 60.8;
 - b. Conduct a performance evaluation of continuous emission monitoring systems (CEMS) or continuous opacity monitoring systems (COMS) as set out in 40 CFR 60.13(c);
 - c. Conduct daily zero and span checks of CEMS and COMS as set out in 40 CFR 60.13(d);
 - d. Ensure all continuous monitoring systems meet the minimum frequency of operation requirements set out in 40 CFR 60.13(e), and are kept in continuous

- operation, except for system breakdowns, repairs, calibration checks, and zero/span adjustments;
 - e. Install continuous monitoring systems to obtain representative emission or process parameters, as set out in 40 CFR 60.13(f);
 - f. Reduce continuous monitoring system data as set out in 40 CFR 60.13(h); and
 - g. Provide the Department a copy of each EPA alternative monitoring approval or relative accuracy test audit approval issued under 40 CFR 60.13(i) or (j).
7. General Control Device Requirements, 40 CFR 60.18.
- a. The requirements of 40 CFR 60.18 apply only when applicable subparts of 40 CFR 60 and 61 refer to the requirements in 40 CFR 60.18.
 - b. Because 40 CFR 60, subpart KKK, applies to affected facilities as set out in 40 CFR 60.630 located at the Alpine Development Project and references 40 CFR 60.18 in 40 CFR 60.633(g), the Permittee is required to meet the requirements of 40 CFR 60.18.
- B. 40 CFR 60, Subpart Dc, UHM heaters--Sources CF-H-64004 and CF-H-64005.
- 1. Applicability and delegation of authority, 40 CFR 60.40c. An affected source is each steam-generating unit with a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.
 - 2. Include in the construction notification required under 40 CFR 60.7 and Condition V (A), the information listed in 40 CFR 60.48c.
 - 3. Standard for sulfur dioxide, 40 CFR 60.42c. If sources combust distillate fuel: Comply with the SO₂ new source performance limitation listed in 40 CFR 60.42c(d) of 215 ng/J (0.50 lb/MMBtu) heat input; or, as an alternative, 0.5 weight percent sulfur. Compliance with the fuel oil sulfur limits may be determined based on a certification from the fuel supplier, as described under §60.48c(f)(1), (2), or (3), as applicable.
 - 4. Compliance and performance test methods and procedures for sulfur dioxide, 40 CFR 60.44c. If sources combust distillate fuel: Comply with §60.44c(g) or §60.44c(h). Where the Permittee seeks to demonstrate compliance with the fuel oil sulfur limits under §60.42c, based on shipment fuel sampling, the Permittee shall comply with §60.44c(g). If the Permittee seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described under §60.48c(f)(1), (2), or (3), as applicable.

5. Emission monitoring for sulfur dioxide, 40 CFR 60.46c. For sources fired on distillate fuel: Determine the average SO₂ emission rate and comply with applicable provisions of 40 CFR 60.46c by sampling the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2), or by maintaining records of fuel supplier certifications, as described under §60.48c(f) (1), (2), or (3), as applicable.
6. Reporting and recordkeeping requirements, 40 CFR 60.48c. Comply with applicable reporting and recordkeeping provisions of 40 CFR 60.48c(g) and (i) by recording and maintaining records of the amounts of each fuel combusted during each day and maintaining records for a period of two years following the date of such record.

If sources combust distillate fuel: Submit performance test data from the initial and any subsequent performance tests and submit quarterly reports as specified in 40 CFR 60.48c(d) and (e).

Keep a copy of each U.S. EPA-issued monitoring waiver or custom monitoring schedule with the permit at the facility.

- C. 40 CFR 60, Subpart Kb, arctic heating fuel tanks and methanol storage tank, - Sources CF-T-61001, CF-T-51001, 59132, 59118, and 59119.
 1. Applicability and designation of affected facility, 40 CFR 60.110b. Volatile organic liquid storage tanks greater than 40 cubic meters in volume (10,567 gallons) are subject to this Subpart as listed in 40 CFR 60.110b(a).
 2. Monitoring of operations, 40 CFR 60.116b.
 - a. Pursuant to 40 CFR 60.116b(a) and (b), keep readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessel for each storage tank greater than or equal to 40 cubic meters (10,567 gallons).
- D. 40 CFR 60, Subpart GG; all turbines listed in Exhibit A.
 1. Applicability and designation of affected facilities, 40 CFR 60.330. Affected units are all stationary gas turbines with a heat input at peak load greater than or equal to 10.7 gigajoules per hour (10.1 MMBtu/hr) based on lower heating value as described in 40 CFR 60.330(a) and (b). Emergency fuel is defined in 40 CFR 60.331(r) as a fuel fired by a gas turbine only during circumstances such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.

2. Standard for nitrogen oxides, 40 CFR 60.332(a)(2) and (k). Comply with the nitrogen oxides emission limitation as listed in 40 CFR 60.332(a)(2). The limit is $STD = 0.0150(14.4)/Y$; where STD is the allowable NO_x emissions (percent by volume) at 15% O₂, and Y is the manufacturer's rated heat rate at manufacturer's peak load (kilojoules per watt hour). Natural gas-fired gas turbines are exempt from 40 CFR 60.332(a)(2) when firing emergency fuel, as defined in 40 CFR 60.331(r).

Do not operate turbine unit CF-G-70001 on fuel oil, except as provided for under emergency fuel provisions listed in 40 CFR 60.332(k). Maintain records documenting the time, date, duration, and reason for each event during which unit CF-G-70001 operates on fuel oil. Submit an excess emission report in accordance with Condition II(I) for each event not provided under 40 CFR 60.332(k) during which CF-G-70001 operates on fuel oil.

3. Standard for sulfur dioxide, 40 CFR 60.333. Comply with the sulfur dioxide new source performance limitation listed in 40 CFR 60.333(a) or (b) of 150-ppm exhaust concentration or 0.8% fuel sulfur content by weight, respectively. Comply with these requirements by burning fuel gas with a hydrogen sulfide content no greater than 200 ppm, or distillate fuel oil with a fuel sulfur content not to exceed 0.15%.
4. Monitoring of operations, 40 CFR 60.334. Comply with 40 CFR 60.334(b) to monitor the sulfur content of the fuel gas or liquid fuel. Record fuel sulfur content or develop a custom schedule to test fuel as specified in 40 CFR 60.334(b)(2). Include with reports submitted under 40 CFR 60.7(c), information as listed in 40 CFR 60.334(c), (c)(2) and (c)(4). Keep a copy of each U.S. EPA-issued monitoring waiver or custom monitoring schedule with the permit at the facility.
5. Test methods and procedures, 40 CFR 60.335.
 - a. The Permittee shall conduct performance tests in accordance with Condition II(D) as required in 40 CFR 60.335(b) and (c), or alternative test methods in accordance with 40 CFR 60.335(f).
 - b. The Permittee shall determine compliance with the sulfur content standard using methodology as described in 40 CFR 60.335(d).
 - c. The Permittee may propose an alternative to the reference methods in accordance with 40 CFR 60.335(f)(1).

E. 40 CFR 60, Subpart KKK;

1. Applicability and designation of affected facility, 40 CFR 60.630. The Alpine facility operates process units that comprise an on-shore natural gas processing plant

and subject to this Subpart per 40 CFR 60.630(a)-(e), KKK. The affected facility is each pump, pressure relief device, open-ended valve or line, valve compressor and flange, or other connector in VOC or wet gas service, and each device or system required under 40 CFR 60, Subpart KKK.

2. Standards, 40 CFR 60.632. Comply with the emission control requirements of 40 CFR 60.632.
3. Exceptions, 40 CFR 60.633. The Permittee may apply any applicable exemptions to 40 CFR 60, subpart KKK, listed in 40 CFR 60.633.
4. Alternative means of emission limitation, 40 CFR 60.634. The Permittee may apply to the federal administrator for permission to use an alternative means of emission limitation in accordance with 40 CFR 60.632(c) and 60.634.
5. Record keeping requirements, 40 CFR 60.635. Comply with the requirements of 40 CFR 60.635.
6. Reporting, 40 CFR 60.636, submit reports in accordance with 40 CFR 60.636. In lieu of submitting a separate report to the Department, the Permittee may attach each semi-annual on-shore natural gas processing plant report to the concurrent facility operating report required by Condition II.G.

VI. 18 AAC 50.050: Incinerator Emission Standards

For sources CF-U-59001A and CF-U-59001B.

- A. The Permittee shall comply with 18 AAC 50.050(a)(2), which states that visibility through the exhaust effluent of an incinerator may not be reduced by visible emissions, excluding condensed water vapor, by more than 20 percent, for a total of more than three minutes in any one hour.
- B. No less than once each calendar year and upon Department request, the Permittee shall conduct a visible emission surveillance on the incinerator exhaust stack to ascertain compliance with 18 AAC 50.050(a)(2). Permittee shall attach the surveillance results to the Facility Operating Report set out in Condition II(G).

IV. 18 AAC 50.055: Industrial Processes and Fuel-Burning Equipment

For sources listed in Exhibit A:

- A. Comply with 18 AAC 50.055(a)(1) and 18 AAC 50.055(b)(1), which state that visible emissions, excluding condensed water vapor, from an industrial process or fuel-burning

equipment may not reduce visibility through the exhaust effluent by greater than 20 percent, for a total of more than three minutes in any one hour, and particulate matter emitted from an industrial process or fuel-burning equipment may not exceed, per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours, 0.05 grains.

- B. Comply with 18 AAC 50.055(c), which states that sulfur compound emissions, expressed as sulfur dioxide, may not exceed 500 ppm averaged over a period of three hours. For sources listed in Exhibit A, Sections A-C, ensure compliance with this requirement by using only fuel gas with a hydrogen sulfide content not to exceed 200 ppm, and by using only distillate fuel oil with a sulfur content not to exceed 0.15%. For sources listed in Exhibit A, Section D, ensure compliance with the requirement by using only distillate fuel oil with a sulfur content not to exceed 0.20%.
- C. Monitoring and recording:
 - 1. Conduct a visible emission surveillance no less than once each calendar year in accordance with Condition II(D);
 - 2. Upon Department request, conduct a particulate matter emission test or visible emission surveillance as set out in Condition II(D); and
 - 3. Measure the hydrogen sulfide content of fuel gas in accordance with either ASTM D4810-88, ASTM D4913-89, or GPA 2377-86. Measure the fuel sulfur content of distillate fuel in accordance with sulfur measurement methods incorporated by reference in ASTM D 396-92 or ASTM D-2880-94 no less than once a month. Permittee may alternatively attach a vendor certification documenting the fuel sulfur content of each fuel delivery to the Alpine facility.
- D. Reporting:
 - 1. Attach to the Facility Operating Report under Condition II(G), Visible Emission Reports for a surveillance conducted under Condition VII(C)(1) or (2).
 - 2. List in the Quarterly Facility Operating Report under Condition II(G):
 - a. The monthly average fuel gas hydrogen sulfide content; and
 - b. The analytical results of distillate fuel oil sulfur content or vendor certification required by Condition VII(C)(3).

VIII. 18 AAC 50.110: Air Pollution Prohibited

All Sources

Comply with 18 AAC 50.110, which states that no person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or property.

- A. Attach to the Facility Operating Report a written description of any public complaint of air pollution, including the date, time, nature of complaint, and measures taken to resolve the complaint;
- B. Take reasonable actions to address air pollution complaints resulting from emissions at the facility; and
- C. Notify the Department in advance of any planned modification or replacement of the fuel-burning equipment, which might result in increased potential air contaminant emissions. The notification must be in writing and must include a description of the proposed change and an estimate of any change in the quantity of emissions of each regulated air contaminant that may occur as the result of the modification or replacement.

IX. 18 AAC 50.305 (a) (4): Owner Requested Limits

Connect the process vent from the glycol dehydration unit to a facility process natural gas line.

X. 18 AAC 50.315 (e) (3) (A): Best Available Control Technology (BACT)

Install emission or operational controls as BACT for the following equipment:

A. Limits

- 1. Oxides of Nitrogen (NO_x) BACT
 - a. Install and operate as BACT for the following fuel burning equipment at the Central Processing Facility:
 - (1) Turbine Units CF-C33012-TB and CF-G-70001 with lean head end (LHE) combustion technology;
 - (2) Turbine Unit CF-G-70002 with dry low NO_x combustion technology;
 - (3) Heater Units CF-H-31003A, -31003B, -64004, & -64005 with low NO_x burners; good operation practices for heater MP1;

- (4) Diesel Units CF-G-70003 & CF-G-70004 with after-cooling, combined with high pressure fuel injection pumps and cylinder design to ensure clean burn in the cylinder;
 - (5) Diesel Unit TG27 a direct injection system with inherent timing-retard; and
 - (6) Units UT1 & UT2 with turbo-chargers and after-cooling.
- b. Comply with the following NO_x emission limits. Emissions from:
 - (1) Unit CF-C33012-TB shall not exceed 157 ppmvd @ 15% O₂ ISO and 233 lb/hr;
 - (2) Unit CF-G-70001 shall not exceed 120 ppmvd @ 15% O₂ ISO and 182 lb/hr;
 - (3) Unit CF-G-70002 shall not exceed 75 ppmvd @ 15% O₂ ISO and 44 lb/hr;
 - (4) Units CF-H-31003A & -31003B shall not exceed 0.08 lb/MMBtu;
 - (5) Units CF-H-64004 & -64005 shall not exceed 0.10 lb/MMBtu;
 - (6) Units CF-G-70003 & CF-G-70004 shall not exceed 7 grams/kW-hr;
 - (7) Unit UT1 shall not exceed 23 lbs/hr;
 - (8) Unit UT2 shall not exceed 20 lbs/hr; and
 - (9) Unit UT2 shall not exceed 62 lbs/hr.
- 2. Carbon Monoxide (CO) control technology--BACT for fuel burning equipment at the Central Processing Facility is good operational practices. The Permittee shall comply with the following CO emission limits as representative of BACT. Emissions from:
 - a. Units CF-C33012-TB, CF-G-70001 and -70002 shall not exceed 20 ppmvd at full load operation⁹;
 - b. Unit CF-C33012-TB shall not exceed 52 lb/hour;
 - c. Unit CF-G-70001 shall not exceed 28 lb/hour;
 - d. Unit CF-G-70002 shall not exceed 10 lb/hour;

⁹ The CO BACT emission limit does not apply during partial-load operation.

- e. Units CF-H-31003A, -31003B, -64004, & -64005 shall not exceed 0.07 lb/MMBtu;
 - f. Units CF-G-70003 & CF-G-70004 shall not exceed 1.95 g/kW-hr;
 - g. Unit TG27 shall not exceed 13 lbs/hr;
 - h. Unit UT1 shall not exceed 4 lbs/hr; and
 - i. Unit UT2 shall not exceed 3 lbs/hr.
3. Sulfur Dioxide (SO₂) control technology--BACT for fuel burning equipment at the Central Processing Facility is use of low sulfur fuel with no post-combustion controls. Comply with the following fuel sulfur limits and emission limits below as representative of BACT:
- a. Hydrogen sulfide content of natural gas fuel shall not exceed 200 ppmv;
 - b. Sulfur content of fuel oil shall not exceed 0.15% by weight;
 - c. Units CF-C33012-TB, CF-G-70001, and 70002 shall meet federal New Source Performance Standards for sulfur dioxide as set out in Condition V(D)(3); and
 - d. Units CF-H-64004 and 64005 shall meet federal New Source Performance Standards for sulfur dioxide as set out in Condition V(B)(3).
4. Particulate Matter control technology---BACT for fuel-burning equipment at the Central Processing Facility is no controls with good operation practices. BACT for flare systems CF-X-35002 and CF-X-35012 is smokeless design with air assist configuration to meet 40 CFR 60.18 requirements. Comply with the following surrogate particulate matter emission limits as representative of BACT. Visible emissions from:
- a. Units CF-C33012-TB, CF-G-70001, and -70002, and CF-H-31003A, -31003B, -64004, and -64005 shall not exceed 10% opacity for greater than three minutes in any one hour while fired on natural gas, and shall not exceed 20% opacity for greater than three minutes in any one hour while fired on liquid fuels; and
 - b. All other industrial processes, incinerators, and fuel-burning equipment to comply with the applicable State visible emission standards listed in Conditions VI(A) and VII(A).

B. Monitoring and Record Keeping

1. NO_x and CO--Monitor and record compliance as follows:
- a. Conduct two series of NO_x emission source tests on exhaust of Units CF-C33012-TB, CF-G-70001, and -70002 within one year of the commission date, in accordance with permit Condition II(D). Conduct one series of tests within 180 days after start-up. Conduct one series during June

- through August, and the second series during the time period in January through March;
- b. If source test results of Condition IX(B)(1)(a) are both below 80% of the NO_x limits specified in Condition IX(A)(1)(b), conduct an emission source test no less than once every five years;
 - c. Except as provided for in Condition IX(B)(1)(b), if source test results are both below 90% of the NO_x limits specified in Condition IX(A)(1)(b), conduct an emission source test no less than once every two years;
 - d. Except as provided for in Conditions IX(B)(1)(b) or (c), within 180 days after conclusion of tests set out in IX(B)(1)(a), install, calibrate, certify, operate, and maintain in accordance with Condition II(E), a continuous oxides of nitrogen emission monitoring system (CEMS) on the exhaust stack of each unit. Continuously monitor and record compliance with Condition IX(A)(1)(b) based upon 1-hour average oxides of nitrogen measurements;
 - e. Conduct no less than one CO emission source test of Units CF-C33012-TB, CF-G-70001, and -70002 in accordance with permit Condition II(D); and
 - f. Conduct one NO_x and CO emission source test on the exhaust of either CF-H-31003A or CF-H-31003B within 180 days after start-up of the units. Conduct one NO_x and CO emission source test on the exhaust of either CF-H-64004 or CF-H-64005, in accordance with Condition II(D) within 180 days after start-up of the units.
2. SO₂--Conduct fuel sulfur monitoring and record keeping in accordance with Conditions V(B)(5), V(D)(4), and VII(C)(3).
 3. PM
 - a. Conduct visible emission surveillance monitoring of fuel burning equipment and incinerators in accordance with Condition II(D), VI(B), VII(C)(1) and (2);
 - b. Determine visible emissions of Flare Units CF-X-35002 and CF-X-35012 in accordance with Condition II(D) no less than once a month;
- C. Reporting:
1. Report NO_x, CO, and O₂ emission source test results in accordance with Condition II(D).
 2. If subject to Condition IX(B)(1)(d), attach a copy of the CEMS quarterly cylinder gas audit, annual relative accuracy audit data reports, and quarterly data assessment report as set out under Condition II(F) to the facility operating report required by Condition II(G).

3. If subject to Condition IX(B)(1)(d), attach to the facility operating report a table of daily average oxides of nitrogen emissions.
4. SO₂--Report fuel sulfur content as provided for under Condition V(B)(6), V(D)(5), VII(D)(2); and
5. PM-10--Report the results of the visible emission surveillance reports as provided for under Conditions VI(C) and VII(D)(1).

EXHIBIT A
PERMITTED SOURCE INVENTORY

The Permittee is authorized under this permit to operate the following stationary emission sources. The design rating, capacity, or throughput is set out in this exhibit only for the purpose of aiding in the identification of the source. The Permittee must notify the Department as described in Condition IV(B) and Condition VIII(C) prior to selecting other equipment make, models, and size, to determine the applicability of regulatory requirements.

EXHIBIT A
PERMITTED SOURCE INVENTORY

A. – ALPINE CENTRAL PROCESSING FACILITY POINT SOURCE INVENTORY

Unit No.	Equipment Use	Description	Annual Hours of Operation / Fuel	Maximum Rated Capacity
CF-C33012-TB	Injection Turbine	N-P MS5382	8,760 / fuel gas	36,700 hp (ISO)
CF-G-70001	Generator Turbine	N-P PG5371	8,760 Total; 500 / liquid fuel ¹	25,800 kW (ISO)
CF-G-70002	Generator Turbine	N-P PGT10+	8,760 Total; 500 / liquid fuel ²	11,183 kW (ISO)
CF-H-31003A	Crude Heater	Born	8,760 / fuel gas	65.6 MMBtu/hr
CF-H-31003B	Crude Heater	Born	8,760 / fuel gas	65.6 MMBtu/hr
CF-H-64004	UHM Heater	Thermoflux	8,760 Total; 500 / liquid fuel ²	20.0 MMBtu/hr
CF-H-64005	UHM Heater	Thermoflux	8,760 Total; 500 / liquid fuel ²	20.0 MMBtu/hr
CF-G-70003	Emergency Generator	Cummins QWF 16V170	500 / liquid fuel; 16 hr/day max ^{6, 7}	2 MW
CF-G-70004	Emergency Generator	Cummins QWF 16V170	500 / liquid fuel; 16 hr/day max ^{6, 7}	2 MW
UT1	Camp Generator	Caterpillar D399 TA	200 / liquid fuel ^{3, 7}	930 kW
UT2	Camp Generator	Caterpillar D399 TA	200 / liquid fuel ^{3, 7}	800kW
TG27	Pad Back-up Generator	Cummins KTTA50-G2 V-16	500 / liquid fuel ^{3, 7}	1,500 kW
H3	Heaters	Totem – 3 @ 0.428 MMBtu/hr each	8,760 / liquid fuel ⁷	1.28 MMBtu/hr
H5	Heaters	Maxiheat – 5 @ 0.42 MMBtu/hr each	8,760 / liquid fuel ⁷	2.1 MMBtu/hr
CF-U-59001A	Waste Incinerator	EnerWaste BOS 3.5T	7,300 / waste	350 lb/hr
CF-U-59001B	Waste Incinerator	EnerWaste BOS 3.5T	7,300 / waste	350 lb/hr
CF-X-35002	HP Flare	Corona	8,760 / fuel gas ⁴	261 Mscf/day ⁵
CF-X-35012	LP Flare	Corona	8,760 / fuel gas ⁴	212 Mscf/day ⁵

Table A Notes:

- ¹ Prior to Phase III, this source (CF-G-70001) is limited to 30 days of operation on fuel gas.
- ² Prior to Phase III, these sources (CF-G-70002, CF-H-64004, CF-H-64005) may operate on liquid fuel up to 4380 hours each.
- ³ Prior to the commencement of the temporary exclusion zone, UT1 and UT2 may operate as described in Exhibit A, Section D. After commencement of the temporary exclusion zone and prior to Phase III, the sources UT1, UT2, & TG27 may operate on liquid fuel for the period shown in Exhibit A, Section E.
- ⁴ Pilot and purge gas operations.
- ⁵ Maximum process gas flaring capacity from vendor.
- ⁶ These two emergency generators are allowed a combined operation of 16 cumulative hrs per day.
- ⁷ This equipment is allowed to operate during the Construction/Pre-Commissioning/Commissioning phase. See Exhibit A, Section E, for the allowed hours of operation during the Construction/Pre-Commissioning/Commissioning phase.

EXHIBIT A (cont.) PERMITTED SOURCE INVENTORY

B. Doyon Drilling Rig 19, Mud Plant, and Bulk Plant

Unit No.	Equipment Use	Description	Hours of Operation	Maximum Rated Capacity
DR1 ¹	Power	Cat D398TA	See footnote 2	700 kW
DR2	Power	Cat D399TA	See footnote 2	976 kW
DR3 ¹	Power	Cat D398TA	See footnote 2	700 kW
DR4 ¹	Power	Cat D399TA	See footnote 2	976 kW
DR5 ¹	Power	Cat D398TA	See footnote 2	700 kW
DR6 ¹	Power	Cat D398TA	See footnote 2	700 kW
	Rig Move Engine	Cat 3406	No Limit	376 hp
	Rig Move Engine	Cat 3406	No Limit	376 hp
	Rig Move Engine	Cat 3114	No Limit	105 hp
CP1	Cement Pump	Cat 3176	See footnote 3	180 kW
CP2	Cement Pump	Cat 3176	See footnote 3	180 kW
DR11	Lister Boiler	Lister	See footnote 3	100 hp
DR12	Lister Boiler	Lister	See footnote 3	100 hp
DR13	Heater	Tioga	See footnote 3	4.2 MMBtu/hr
DR14	Heater	Tioga	See footnote 3	3.5 MMBtu/hr
DR15	Heater	Lister	See footnote 3	4.0 MMBtu/hr
MP1	Heater	Mud Plant Heater	8,760 hr/yr	1.3 MMBtu/hr
BP1	Power	Detroit 6063-GK35	See footnote 3	300 kW
BP2	Power	Detroit 6043-GK35	See footnote 3	160 kW
Doyon 19 Tank ⁴	Fuel Storage	Tank	N/A	14,000 gallons

Table B Notes:

¹ The configuration of these sources' exhaust stacks is such that they are clustered together and equally spaced around the inside perimeter of a 30 inch diameter circle.

- ² Drill Rig sources DR1 through DR6 may initially be operated up to 8,760 hours per 12 month period. Upon conversion of drill rig operations to high-line power, the Permittee shall limit concurrent operation of Drill Rig sources DR1, DR3, DR5, & DR6 to no more than one unit, except when moving the drill rig between wells. When moving the drill rig between wells, limit the concurrent operation of sources DR1, DR3, DR5, and DR6 to no more than two units. Upon conversion to high-line power, drill sources DR2 & DR4 shall not be operated with the exception that DR2 is permitted to operate during rig movement activities.
- ³ Drill Rig sources CP1, CP2, & DR11 through DR15, may initially be operated up to 8,760 hours per year. Prior to commencing the temporary exclusion zone, bulk plant sources BP1 and BP2 may initially be operated up to 4,440 hours per year. After commencing the temporary exclusion zone, BP1 and BP2 may operate continuously until conversion of the drill rig to highline power, after which no operation is permitted. Upon conversion of drill rig operations to high-line power, the Permittee shall limit operation of sources CP1 & CP2 to 500 hours per 12-month period, and sources DR11 through DR15 to 8,322 hours per 12-month period.
- ⁴ This tank was constructed in 1982. 40 CFR 60, subpart Kb, is not applicable to this tank as it was last constructed, reconstructed, or modified before July 23, 1984.

EXHIBIT A (cont.)
PERMITTED SOURCE INVENTORY

C. Construction Reserve Pool

Unit NO.	Annual Fuel Consumption Limit	Daily Fuel Consumption Limit
<i>Generic Well Servicing Equipment</i> ¹	533,033 gallons / 12-month period	5,831 gallons / day total ³
<i>Well Frac Unit(s)</i> ²	87,445 gallons / 12-month period	

¹ *Generic Well Servicing Equipment* includes the heaters and internal combustion engines associated with well servicing equipment such as the Wire-line, Slick-line, N2 Pumping, Coil Tubing, and Hot Oil units or other well servicing technologies, except for Well Frac Unit(s).

² The Well Frac Unit(s) are limited to IC engines. The Well Frac Unit(s) may only operate at Alpine between November 1 and May 31.

³ The daily fuel consumption limit applies to the total fuel consumption of all Generic Well Servicing Equipment and the Well Frac Unit(s).

EXHIBIT A (cont.)
PERMITTED SOURCE INVENTORY

D. Construction Equipment I

Unit No.	Equipment Use	Description	Annual Hours of Operation ¹	Maximum Rated Capacity
UT1	Camp Generator	Mfr Unknown	Continuous	930 kW
UT2	Camp Generator	Mfr Unknown	Continuous	800 kW
3	Camp Incinerator	Mfr Unknown	Continuous	750 pph
4	Crew Generator	Mfr Unknown	Continuous	160 kW
5	Crew Generator	Mfr Unknown	Continuous	160 kW
7	Runway Lighting Generator	Mfr Unknown	6,570	25 kW
8	Tank Farm Generator	Mfr Unknown	Continuous	30 kW
9	Gray Water Pump Generator	Mfr Unknown	5,856	120 kW
10-23	Yard Lighting Generators	Mfr Unknown, 15 kW each	6,570	210 kW
24	Communication Generator	Mfr Unknown	Continuous	75 kW
D1	Camp Generator	Mfr Unknown	1,440	379 kW
D2	Camp Generator	Mfr Unknown	1,440	379 kW
AC1	Camp Generator	Mfr Unknown	1,440	379 kW
AC2	Camp Generator	Mfr Unknown	1,440	379 kW
A1	Camp Generator	Mfr Unknown	1,440	376 hp
A2	Camp Generator	Mfr Unknown	1,440	376 hp
A3	Camp Generator	Mfr Unknown	1,440	379 kW
A4	Camp Generator	Mfr Unknown	1,440	379 kW
B1	Camp Generator	Mfr Unknown	1,440	376 hp
B2	Camp Generator	Mfr Unknown	1,440	376 hp
B3	Camp Generator	Mfr Unknown	1,440	379 kW
B4	Camp Generator	Mfr Unknown	1,440	379 kW
C1	Camp Generator	Mfr Unknown	1,440	376 hp
C2	Camp Generator	Mfr Unknown	1,440	376 hp
C3	Camp Generator	Mfr Unknown	1,440	379 kW
C4	Camp Generator	Mfr Unknown	1,440	379 kW
H5	5 Heaters	Maxiheat	5,110	2.1 MMBtu/hr
H3	3 Heaters	Totem	5,110	1.3 MMBtu/hr
	Test Flare CD-1	Mfr Unknown	80	7.5 MMscf/d
	Test Flare CD-2	Mfr Unknown	80	7.5 MMscf/d
	Temporary Construction	Cummins QWF 16V170	Continuous	2,000 kW
	Temp Rig Primary Power	Cat D399 TA	2,928	900 kW
	Temp Rig Primary Power	Cat D399 TA	2,928	900 kW
	Temp Rig Primary Power	Cat D399 TA	2,928	900 kW
	Temp Rig Cold Start	Lister	0	45 kW
	Temp Rig Cold Start	Lister	0	45 kW
	Temp Rig Cold Start	Cat D353	0	352 kW
	Temp Rig Cold Start	Lister	0	45 kW
	Temp Rig Cold Start	Lister	0	45 kW
	Temp Rig Boiler	Kewanee	2,928	100 hp
	Temp Rig Boiler	Kewanee	2,928	100 hp
	Temp Rig Air Heater	Tioga	2,928	4.2 MMBtu/hr
1	Temp Colville Rig Camp	Mfr Unknown	1,440	376 hp
2	Temp Colville Rig Camp	Mfr Unknown	1,440	376 hp
3	Temp Rig Camp	Mfr Unknown	1,440	376 hp
4	Temp Rig Camp	Mfr Unknown	1,440	376 hp

¹ The Permittee shall not operate Construction Equipment listed in Section D upon invoking the temporary exclusion zone in Condition IV.H except as provided in Exhibit A, Section E. Annual hours of operation mean hours of operation within any 12-month rolling period.

EXHIBIT A (cont.) PERMITTED SOURCE INVENTORY

E. Construction Equipment II

Column 1	Column 2	Column 3	Column 4	Construction / Pre-Commissioning / Commissioning Phase	
				Column 5	Column 6
Unit No.	Equipment Use	Description	Cumulative Rated Capacity ¹	Allowed Operations in Exclusion Zone ¹	Allowed Operations out of Exclusion Zone ¹
AC1	Camp Generator 1	Caterpillar D3406TA	379 kW	0 hrs	1,460 hrs
AC2	Camp Generator 2	Caterpillar D3406TA	379 kW	0 hrs	1,460 hrs
B1	Camp Generator	Mfr Unknown	379 kW	2,920 hrs	730 hrs
B2	Camp Generator	Mfr Unknown	379 kW	2,920 hrs	730 hrs
B3	Camp Generator	Mfr Unknown	379 kW	2,920 hrs	730 hrs
B4	Camp Generator	Mfr Unknown	379 kW	2,920 hrs	730 hrs
UT1	Camp Generator	Mfr Unknown	930 kW	2,920 hrs	2920 hrs.
UT2	Camp Generator	Mfr Unknown	800 kW	2,920 hrs	2920 hrs.
3	Camp Incinerator	Mfr Unknown	750 pph	Continuous	
	APC Office Generator	Mfr Unknown	150 kW	4,380 hrs	2,920 hrs
4	APC Crew Generator	Mfr Unknown	160 kW	4,380 hrs	730 hrs
5	APC Crew Generator	Mfr Unknown	160 kW	4,380 hrs	730 hrs
	Fuel Generator	Mfr Unknown	65 kW	4,380 hrs	730 hrs
	Yard Lighting Generators	Mfr Unknown, 20 @ 8 kW each	160 kW	Continuous	
24	Communication Generator	Mfr Unknown	75 kW	4,380 hrs	
TG10-19	Module Generators	Mfr Unknown 10 @ 50 kW each	500 kW	2,920 hrs	730 hrs
TG25	Module E2 Generator	Mfr Unknown	100 kW	730 hrs	0 hrs
TG26	Module E3 Generator	Mfr Unknown	100 kW	730 hrs	0 hrs
TG27	Pad Back-up Generator	KTTA50-G2 V-16	1,500 kW	2,920 hrs	2,920 hrs
	50 Heaters @ North and South Pads	Tioga - 50 @ 0.6 MMBtu/hr each	30.0 MMBtu/hr	Continuous	730 hrs
H5	5 Heaters @ North and South Pads	Maxiheat - 5 @ 0.42 MMBtu/hr each	2.1 MMBtu/hr	Continuous	
H3	3 Heaters @ North and South Pads	Totem - 3 @ 0.428 MMBtu/hr each	1.28 MMBtu/hr	Continuous	
	Test Flare (CD-1)	Mfr Unknown	7.5 MMscf/day	80 hrs	
	Test Flare (CD-2)	Mfr Unknown	7.5 MMscf/day	80 hrs	
	Temporary Construction Generator ³	Cummins QWF 16V170	2,000 kW	4,380 hrs	2,920 hrs
	Temporary Construction Generator ³	Cummins QWF 16V170	2,000 kW	4,380 hrs	2,920 hrs
	CD-2 Rig Primary Power ²	Caterpillar D399 TA	900 kW	2,928 hrs	
	CD-2 Rig Primary Power ²	Caterpillar D399 TA	900 kW	2,928 hrs	
	CD-2 Rig Primary Power ²	Caterpillar D399 TA	900 kW	2,928 hrs	
	CD-2 Rig Cold Start ^{2,4}	Lister	45 kW	N / A ⁴	
	CD-2 Rig Cold Start ^{2,4}	Lister	45 kW	N / A ⁴	
	CD-2 Rig Cold Start ^{2,4}	Caterpillar D353	352 kW	N / A ⁴	
	CD-2 Rig Cold Start ^{2,4}	Lister	45 kW	N / A ⁴	
	CD-2 Rig Cold Start ^{2,4}	Lister	45 kW	N / A ⁴	
	CD-2 Rig Cold Start ^{2,4}	Lister	45 kW	N / A ⁴	
	CD-2 Rig Boiler ²	Kewanee	100 hp	2,928 hrs	
	CD-2 Rig Boiler ²	Kewanee	100 hp	2,928 hrs	
	CD-2 Rig Air Heater ²	Tioga	4.2 MMBtu/hr	2,928 hrs	
	4 - Portable Light Generators	Mfr Unknown	20 kW each	2,880 hrs	
1	Temp Colville Rig Camp Generator ³	Mfr Unknown	376 hp	1,440 hrs	
2	Temp Colville Rig Camp Generator ³	Mfr Unknown	376 hp	1,440 hrs	
3	Temp Rig Camp Generator ³	Mfr Unknown	379 kW	1,440 hrs	
4	Temp Rig Camp Generator ³	Mfr Unknown	379 kW	1,440 hrs	

¹ The equipment, ratings, and operating hours are estimates provided by the Permittee. While actual equipment and ratings may vary, the Cumulative Rated Capacity, and hours of operation are enforceable limits. Condition IV B allows for changes to equipment type, numbers, and capacity. While the Department may require additional criteria to be met, in general, changes under IV.B. could be allowed provided there is no net increase in criteria emissions, alternative equipment or equipment providing offsets are of similar type, the change is not classified under 18 AAC 50.300(h), no additional air quality requirements are needed, and operational records are kept. The equipment listed in Column 6 may be operated from the end of the exclusion zone until February 1, 2001 or until the beginning of Phase III operation as defined in Condition IV.H.3 whichever event occurs first.

² The Permittee may operate a second drill rig. This 'CD-2 rig' is limited to operations on the CD-2 pad during winter months. Winter months in this case is considered to be November 1 through May 31.

³ There are 4 generators in the 2 housing areas @ the Colville River crossing and CD-2. The Permittee may operate the generators only during the winter months (November 1 through May 31) up to 1,440-hrs/yr. Prior to the start of Phase III operations as defined in Condition IV.H.3 or February 1, 2001 only 1 generator per housing area may be operated at a time.

⁴ The Permittee may only operate these engines during rig movement activities.

⁵ These generators are allowed to operate past the end of the Construction/Pre-Commissioning/Commissioning Phase. See Exhibit A, Section A for the allowed operation after startup.

EXHIBIT A (cont.)
PERMITTED SOURCE INVENTORY

F. – Alpine Central Processing Facility NSPS Tank Inventory¹⁰

Unit No.	NSPS Applicable?	Contents	Maximum Rated Capacity (m³)
59132	Yes	Arctic Heating Fuel	57
59118	Yes	Arctic Heating Fuel	57
59119	Yes	Arctic Heating Fuel	57
CF-T-61001	Yes	Arctic Heating Fuel	525
CF-T-51001	Yes	MeOH	119

¹⁰ This table is included in the permit for identification of NSPS applicability only.

EXHIBIT B

FACILITY OPERATING REPORT

Submit to the Department two copies of the quarterly Facility Operating Reports, no later than the 30th day of April, July, October, and January for operations during the preceding calendar quarter, as required in Condition II(G) of this permit. This report shall include the following information (all quantities must be reported, even if zero):

1. Facility Identification: Name of company, facility name, location, and permit number;

ARCO Alaska, Inc.
Alpine Development Project Facility
P.O. Box 100360
Anchorage, AK 99510-0360
UTM Coordinates: Northing 7805.5 km, Easting 578.0.
Air Quality Control Permit No. 9973-AC017

2. Condition III(F) - For each source listed in Exhibit A, Section A and B, list the hours of operation. For each source listed in Exhibit A, Section A list the fuel type, and fuel consumption each month (scf or gallon).
3. Condition IV(K)(3) - report the operating hours and date of removal for the sources listed in Exhibit A, Sections D & E as recorded per IV(K)(1) & (2). Operating hour records for the sources marked as allowed continuous operation are not required to be kept or reported.
4. Condition IV(S) - Report the emissions from produced gas flaring events.
5. Conditions V(B)(6), V(D)(4), VII(D)(2), and X(C)(4) - Fuel sulfur content and fuel gas hydrogen sulfide content.
6. Condition X(C)(3) - If applicable, daily NO_x emissions measured by CEMS.
7. Unless submitted to the Department under separate cover, the Permittee shall attach or include reports as listed below in accordance with the Conditions cited below:
 - a. Condition II(E), V(A)(2) and X(C)(2) - Continuous monitoring system Q/A reports and Data Reports;
 - b. Condition II(I)(2) - Certified copies of Excess Emission Reports;
 - c. Condition IV(C) - Quarterly ambient monitoring data reports;
 - d. Periodic NSPS Reporting as set out in Condition V; and
 - e. Visible Emission Surveillance Reports as set out in Condition VI(B), VII(D)(1), and Condition X(C)(5).

8. Certify and submit the Facility Operating Report to the Department in accordance with Condition II(A) and II(B).

EXHIBIT C

SUBMISSION LIST

1. Certify and submit all documents in accordance with Conditions II(A) and (B), and 18 AAC 50.205.
2. Submit source test reports and notices required under Conditions II(D)(3), (4), and (5), Condition V(A)(3), and Condition VII(D)(2).
3. Submit monitoring system notices, requests, Q/A reports, and Data reports set out under Condition II(E) and (F) and Condition IV(C).
4. Submit excess emission and operations notices as required by Condition II(H) and (II)(I).
5. Submit notification for reopening permit as set out in Condition III(E).
6. Submit facility changes as set out in Conditions IV(B) and VIII(C). Submit dispersion modeling, if requested, as set out in condition IV(B)(2)(b).
7. Submit drill rig stack configuration documentation as required by Condition IV(F)¹¹.
8. Submit drill rig conversion notification and notification regarding completion of development drilling as set out in Condition IV(N).
9. Submit NSPS/NESHAPS reports/certifications as set out in Condition V, V(A)(1), and V(B)(2).

¹¹ Drill rig stack configuration has already been submitted.

EXHIBIT D
PERMIT APPLICATION DOCUMENTATION

January 6, 2000	AAI Final Certification letter to ADEC.
January 4, 2000	Comments on the preliminary permit from trustees for Alaska.
December 10, 1999	Comments on the preliminary permit from AAI.
November 23, 1999	Fax from Secor to ADEC regarding revised temporary exclusion zone.
November 22, 1999	Email from Thomas Damiana to Alan Schuler regarding phase 3 SO ₂ impacts.
November 22, 1999	Email from Thomas Damiana to Alan Schuler regarding phase 3 NO _x increment.
November 19, 1999	Fax to ADEC from AAI regarding microturbine location.
November 18, 1999	Fax to ADEC from AAI regarding generator BACT.
November 18, 1999	Email from Thomas Damiana (Secor) to Alan Schuler Regarding heater modeling.
November 17, 1999	Mike Stahl email to Brian Renninger regarding revised table D.
November 16, 1999	Fax from Steven Daugherty to ADEC regarding Alpine COBC.
November 11, 1999	DOG letter to Mike Stahl regarding the right to restrict access to the temporary exclusion zone.
November 10, 1999	Email from Mike Stahl to Thomas Damiana regarding rig boiler modeling.
November 10, 1999	Mike Stahl email to Alan Schuler regarding NP turbines and revised permit terms and revised source inventory tables.
November 4, 1999	Secor email to Alan Schuler regarding construction reserve pool modeling, and revised emission estimates.
November 2, 1999	AAI letter to ADEC regarding TEG process vents and temporary tanks.
November 2, 1999	AAI email to ADEC regarding emissions questions asked by ADEC.

EXHIBIT D (cont.)
PERMIT APPLICATION DOCUMENTATION

October 20, 1999	AAI letter to DNR regarding right to control access to temporary exclusion zone.
October 18, 1999	AAI supplemental information and amendment revisions.
October 13, 1999	AAI letter to ADEC responding to ADEC's letter of September 29.
October 11, 1999	Alan Schuler Email to Jim Baumgartner regarding temporary exclusion zone.
October 11, 1999	Email chain between Alan Schuler, Jeff Anderson, and Kim Baumgartner regarding temporary exclusion zone.
September 29, 1999	ADEC letter to AAI regarding completeness information and information requests.
July 20, 1999	AAI amendment document.
July 20, 1999	AAI letter to ADEC presenting an amendment document to support 1999 application.
July 12, 1999	AAI permit amendment application.
June 29, 1999	Mike Stahl email to Alan Schuler regarding rounding.
June 15, 1999	Mike Stahl email to Alan Schuler regarding facility access.
June 14, 1999	Pete Miller email to Alan Schuler regarding the use of OLM.
May 13, 1999	ADEC letter to AAI granting minor permit changes.
April 27, 1999	AAI letter to ADEC requesting minor permit changes.
February 1, 1999	ADEC letter to AAI issuing Alpine permit No. 9873-AC033.
September 14, 1998	PSD Air Quality Permit Application for the ARCO Alaska, Inc., Alpine Development Project.

EXHIBIT D (cont.)
PERMIT APPLICATION DOCUMENTATION

September 24, 1998	AAI letter from Michael Stahl to John Stone (ADEC), regarding drill rig issues.
October 2, 1998	Addendum to the PSD Air Quality Permit Application for the ARCO Alaska, Inc., Alpine Development Project, Revised Section 11.0, Additional Class II and Class I Impact Analyses.
October 9, 1998	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding Response to Completeness issues.
November 2, 1998	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding BACT analysis.
November 3, 1998	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding modeling revision of construction activities.
November 12, 1998	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding Turbine BACT analysis.
November 23, 1998	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding Construction Reserve Pool equipment.
December 16, 1998	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding revisions to the Construction Reserve Pool ambient analysis.
January 12, 1999	AAI letter from Michael Stahl to Jim Baumgartner (ADEC), regarding comments to the preliminary permit decision.
January 11, 1999	Nuovo Pignone Letter from A. Ceresia to Parsons Engineering regarding DLN status on Frame 5C turbines.
January 19, 1999	AAI letter from Michael Stahl to Jim Baumgatner (ADEC), regarding comments to the preliminary permit decision.

EXHIBIT E
TEMPORARY EXCLUSION ZONE

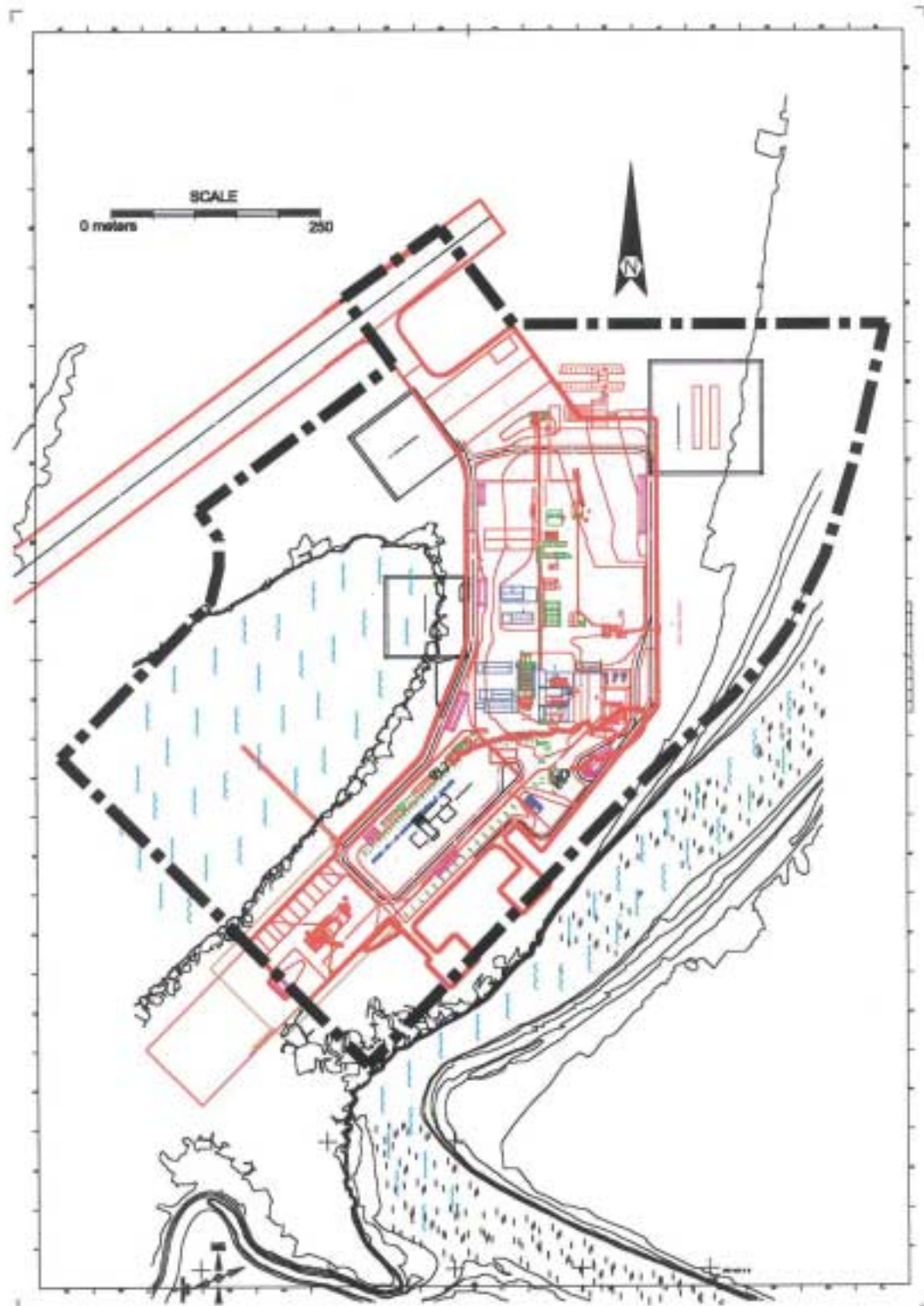


EXHIBIT F
EXCESS EMISSION NOTIFICATION FORM

Excess Emission Notification Form

Submit to: Facsimile: (907) 269-7508

Telephone: (907) 269-8888

Email: airreports@envircon.state.ak.us

Company Name _____

Facility Name _____

1. Event Information (Use 24-hour clock):

	END Time:	START Time:	Duration (hr:min):
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

2. Cause of Event (Check all that apply):

- | | | |
|------------------------------------|--|--|
| <input type="checkbox"/> START UP | <input type="checkbox"/> UPSET CONDITION | <input type="checkbox"/> CONTROL EQUIPMENT |
| <input type="checkbox"/> SHUT DOWN | <input type="checkbox"/> SCHEDULED MAINTENANCE | <input type="checkbox"/> OTHER _____ |

Provide a detailed description of what happened. Attach additional sheets as necessary.

3. Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

4. Emission Standard Exceeded:

Identify each Emission Standard and Permit Condition exceeded during the event. Describe in detail, the extent to which each Standard or Condition was exceeded. List ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Standard or Condition	Limit	Exceedence
_____	_____	_____
_____	_____	_____

5. Emission Reduction:

Describe in detail, ALL of the measures taken to minimize and/or control emissions during the event. Attach additional sheets as necessary.

6. Corrective Actions:

Describe in detail, ALL of the corrective actions taken to restore the system to normal operation. Attach additional sheets as necessary.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name _____

Signature _____

Date _____